

**8 - 10 August 2004, Palm Springs, USA.**

**Source:** CN1 Chairman  
**Title:** CN1 status report  
**Agenda item:** 6.1.1  
**Document for:** INFORMATION

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## **1. EXECUTIVE SUMMARY**

There has been two CN1 WG meetings since the previous CN plenary meeting. The first one of these was an additional meeting to allow more meeting time to complete as many Rel-6 issues as possible. This CN1 #34bis was hosted by Nokia in Helsinki in June. The regular CN1 meeting number #35 was hosted by ETSI at Sophia Antipolis. All agreed CRs on specifications under CR control were forwarded from Helsinki bis meeting to CN1 #35 for endorsement. The meeting reports are available in document NP-040363.

As usual, the documents for approval are presented by work item under each release. Category A mirror CRs have been grouped together with the corresponding category F CR.

CN1 elected a new vice chairman to replace Richard Brook who had to resign. There were two candidates, Keith Drage from Lucent and Atle Monrad from Ericsson. The MCC arranged a vote, where 37 votes were cast and all of them were valid. Out of those 37 votes 25 were in favour of Atle Monrad and 12 in favour of Keith Drage. This would not be sufficient majority to win the election on the first round, but hearing the result of the first vote, Keith withdraw his candidacy and Atle was elected without the second vote.

It was also the first CN1 meeting for our new MCC expert Andrijana Jurisic, who has been taking care of CN2 before.

The document deadline before the WG meetings was discussed with the conclusion that the deadline needs to be moved earlier than the current 3 working days but the possibility to submit late documents still needs to be kept, even though it can not be guaranteed that the late documents are treated. Also separate deadlines for tdoc requests and document submission was supported, but no agreement was reached between 4 and 5 working days' lead time, i.e. whether the deadline is Friday or Monday. The decision was left open.

## **2. INFORMATION TO BE NOTED**

### **2.1 Meeting schedule for 2004 and 2005**

No additional meetings have been agreed and from now on CN1 will be following the agreed CN working groups meeting schedule for the rest of year 2004 and for 2005.

### **2.2 Liaison statements for information**

None of the liaison statements from CN1 #34bis or CN1 #35 were sent to TSGN plenary, so NP-040364 contains the sent liaison statements for information.

### 2.3 3GPP work plan status

CN1 tasks on the 3GPP work plan version dated on the 8<sup>th</sup> of July 2004 were reviewed during the meeting and several comments were made. All CN1 originated changes were documented in N1-041606, which has already been used as input for the current version.

#### CN1 Rel-6 work item status in CN1 #35:

WI	%	Estim.	Open items
IMS interoperability	100	Dec-2003	None
Extensions to SIP	95	Sep-2004	Need to register to orig-parameter with IANA
Followup of IETF	100	Sep-2004	None
WLAN scenario 2	98	Sep-2004	Alternative NAI Possible text restructuring in PLMN selection
Interworking towards non-IMS SIP	100	Sep-2004	None
Interworking towards IPv4 (SIP aspects)	100	Sep-2004	None
Presence	91	Dec-2004	Partial publication Event throttling Loop detection if lists within lists
MBMS	90	Dec-2004	MBMS security procedures in 24.109
WLAN scenario 3	60	Dec-2004	Error handling Subsequent tunnel setup Timer definitions PDG redirection procedure
Group management	80	Dec-2004	Treated as part of the other items using GM
Conferencing	85	Dec-2004	Conference package (IETF) CPCP (IETF) Floor control (IETF)
Messaging	52	Dec-2004	MSRP (IETF) SBLP (SA2) Generic SIP procedures to 24.229 (CN1)
Domain specific access class barring	2	Dec-2004	MM procedures for ACBOP GMM procedures for ACBOP
Subscriber certificates	85	Dec-2004	Extension of authentication proxy description Extension of XML schema
Network sharing	90	Dec-2004	Cause value ranking (CN1) LAI handling at the UE (CN1)
IMS emergency call	0	Jun-2005	All the work, just do it
Local services	0	Jun-2005	All the work, just do it
SIP enhancements for trace	2	Jun-2005	All the work, just do it

## 2.4 Specifications for approval

CN1 sends the following specifications for CN plenary for approval.

NP-040365 is the WLAN stage 3 specification 3GPP TS 24.234 (3GPP system to Wireless Local Area Network (WLAN) interworking; User Equipment (UE) to network protocols; Stage 3). CN1 still expects to do some more work in this specification, but considers it mature enough to be put under CN plenary version control now.

NP-040366 is Subscriber Certificates stage 3 specifications 3GPP TS 24.109 (Bootstrapping interface (Ub) and Network application function interface (Ua); Protocol details). There are known open items in this one also, but it is considered to be mature enough to be put under CN plenary version control.

NP-040367 is the IMS Conferencing stage 3 specification 3GPP 24.147 (Conferencing using the IP Multimedia (IM) Core Network (CN) subsystem; Stage 3). In this case the main open items are IETF dependencies and the CN1 specification is considered to be mature enough to go under CN plenary version control.

NP-040368 is the CN1 MBMS working document 3GPP TR 29.846 (Multimedia Broadcast/Multicast Service (MBMS); CN1 procedure description). All material contained in this TR was shifted to CRs on existing specifications and these CRs are provided for approval in CN #25 under work item MBMS. It is the intention of CN1 that if the plenary approves the TR, then it will remain as a project time document which will not be maintained any more.

### **3. ISSUES FOR ACTION/DECISION BY CN PLENARY**

#### **3.1 Liaison statements to TSGN plenary**

There are no liaison statements from CN1 to TSGN plenary and the sent LSs in NP-040364 are for information for CN.

#### **3.2 Critical CRs**

Two sets of CRs were agreed conditionally in CN1 #35. One of them was about the UE criteria for deciding whether a suitable channel for speech has been allocated in-call modification procedure and the other one introduced USIM based ciphering to ASCI services. In both cases the condition was a dependency to CRs that were treated in another group. These dependencies were resolved after the CN1 meeting and the condition was not met in either case, so the CN1 CRs were not submitted to this plenary either. The CN1 meeting report was amended accordingly and distributed on the CN1 mailing list for information. The condition that was defined in the CN1 meeting was followed literally, even though in the case of USIM based ASCI ciphering there is no evidence that GERAN had objected to the principle. It was indicated by the originator that they consider submitting the CN1 CRs to CN plenary as company contributions.

The CRs in NP-040374 were found necessary correction to GPRS SNDCP layer XID negotiation of compression algorithm. What makes these critical is that there are already existing Rel-4 mobiles on the market, so effectively the essential correction has been designed to co-exist with the implementations before and after the specification correction.

There was also a request to submit the CR in NP-040383 in a separate package to the plenary for approval. If approved, this CR is at least part of the solution to a long debate on IMS session setup with no preconditions.

## **4. DOCUMENTS FOR APPROVAL**

### **4.1 R98 and older work items**

There are no GSM phase 2+ CRs for approval this time.

## **4.2 R99 work items**

The R99 CRs in NP-040373 correct the notification procedures of voice group call (VGCS) and voice broadcast call (VBS).

### **4.3 Release 4 work items**

NP-040374 is a correction to SNDCP compression negotiation. The CRs are touching an area which has already been implemented and the change is designed to allow the interoperability of the implementations before and after the change. CN1 is still considering whether a change on 09.95 would also be necessary.



## **4.4 Release 5 work items**

### **4.4.1 Provisioning of IP-based multimedia services (IMS-CCR)**

NP-040385 corrects the syntax of P-Charging-Vector header both in 24.228 and 24.229. The other CRs in this pack add the missing event attribute to contact header of NOTIFY message, correct the handling of network initiated de-registration and correct the criteria to remove the P-Access-Network-Info header at the boarder of the trust domain.

There is no mirror CR for N1-041552 in NP-040385, since these changes plus some more are all contained in N1-041610 in NP-040381. Both are categorised as category F CRs. N1-041628 and N1-041629 in NP-040385 are slightly different changes in Rel-5 and Rel-6. Because the Rel-6 version covers also the multiple registration case it is also marked under category F.

## 4.5 Release 6 work items

### 4.5.1 Presence

Some CRs in presence CR pack NP-040380 still address editorial and readability issues in 3GPP TS 24.141. The more substantial changes in the CR pack enhance the publication procedures with publication rate limiting and partial publication and Ut interface procedures for presence data manipulation. There are also corrections on user identity verification and authorisation and filter criteria.

### 4.5.2 MBMS

All material in MBMS TR 29.846 that is intended for the existing TSs was shifted to individual CRs on 24.007, 24.008 and 44.065 and CN1 does not need the TR any more.

The 24.007 and 24.008 related MBMS CRs are provided for approval in NP-040377 and the single CR that defines the NSAPI for MBMS is in NP-040387.

NP-040369 contains an MBMS WID update with two major changes. The schedule is delayed to the end of year 2004 in CN #25 due to known open item in MBMS security procedures that CN1 expects to define in 24.109.

### 4.5.3 IMS Phase 2

IMS phase 2 CRs are in two CR packs, NP-040381 and NP-040384.

NP-040381 contains several changes on 24.229. The change of de-registration in N1-041586 is needed for multiple registration. The backwards compatibility problem created by Rel-6 CR was solved by corresponding Rel-5 CR in N1-041639. The Rel-5 CR was seen as essential correction even though the problem was detected only due to new feature in later release.

There is no mirror CR for N1-041552 in NP-040385, since these changes plus some more are all contained in N1-041610 in NP-040381. Both are categorised as category F CRs.

N1-041639 and N1-041614 are both cat. F since the contents is slightly different.

The rest of the CRs in this CR pack deal with addition of new features multiple registration, session timer, replaces, join, referredby and support of TLS.

23.218 CRs in NP-040384 optimises third party registration at ISC interface and define that the checking of initial filter criteria is stopped if the AS changes the request-URI.

#### 4.5.4 SIP messaging

There are two CR packs on this work item since the draft TS 24.247 is not yet under version control.

#### 4.5.5 Additional SIP capabilities

There are two CR packs on this work item.

NP-040382 adds the CN1 part of IPv6 to IPv4 interworking. The IMS-ALG still needs more work in CN3, but this CR addresses the SIP part in CN1 responsibility.

NP-040383 adds the possibility to set up IMS session without preconditions. The capability to do so is defined, but the precise criteria when it can or should or shall be done is not. This criteria has been discussed at length and it may remain outside of the scope of the specification. It was requested in CN1 meeting that this CR should be submitted to plenary in a separate CR pack.

#### 4.5.6 WLAN interworking stage 3

There are no CRs against WLAN WI, since the draft TS 24.234 is provided for approval to this meeting.

#### 4.5.7 Subscriber certificates

There are no CRs against subscriber certificates WI, since the draft TS 24.109 is provided for approval to this meeting.

#### 4.5.8 PS based emergency calls

There has been no progress on this WI.

#### 4.5.9 PS based local services

There has been no progress on this WI and long delay until June 2005 is now indicated in the schedule.

#### 4.5.10 SIP procedures for trace

There has been no progress on this WI. CN1 could not identify any feasible mechanism to implement the SIP changes outside IETF and based on this a long delay until June 2005 is indicated. Assuming this is too late to be acceptable for a Rel-6 work item, the other groups are requested to study other mechanisms that do not require SIP changes.

#### 4.5.11 Network sharing

The intention was to provide a full set of network sharing related CRs for approval to this meeting. However, it was found out during the meeting that the CR on LAI handling at the UE could not be agreed yet, despite several revisions, and that another one on reject cause value ranking was missing. Both of these open items are CN1 issues which we expect to complete for the next plenary.

The rest of the CN1 CRs in network sharing are provided for approval in NP-040375 and these introduce network sharing to 24.007, 24.008, 23.122 and 29.018.

Network sharing WID is revised in NP-040370. This new version of the WID was agreed prior to review of the final revisions of the CRs, assuming a positive outcome. One of the key CRs still had to be postponed to the next meeting, so therefore the completion of 24.008 task of network sharing can not happen before CN #26 in December 2004.

#### 4.5.12 Downlink Advanced Receiver Performance (DARP)

NP-040376 contains a CR that adds the indication of DARP capability to MS CM3 and MS RAC information elements on behalf of GERAN. There is no need to add any new task to the work plan due to this, since it's foreseen that this CR is the only work that is needed from CN1 in DARP work item.

#### 4.5.13 GTP enhancements

There is one GTP enhancements related CR in NP-040379. This CR corrects the criteria for the network to include the N-PDU numbers IE in the RAU ACCEPT message.

#### 4.5.14 TEI-6

TEI CRs in NP-040378 introduces the Extended RLC/MAC Control Message segmentation capability indication on behalf of GERAN and changes the RRC establishment cause for certain PDP context activations. The two last CRs integrate the definition of the specific handling of the US country codes better in the text of 23.122 and add a possibility for the UE to select another PLMN if an MM error cause indicating serious incompatibility in message encoding is received.

The US country code handling was also considered on earlier releases, but the change was made to Rel-6 only, since all manufacturers interpreted the old text the same way.

NP-040386 is a CR that creates a Rel-6 version of 29.994. It has been found out that there is an implementation error in some pre-R99 mobile stations. It was considered inappropriate to

change the core specifications due to this, but instead the error has been documented and a possible workaround in the network is identified.

## **4.6 Release 7 work items**

This time CN1 is proposing the first Rel-7 work items. Two work items have already matured to work item description.

### **4.6.1 VGCS Enhancements**

NP-040371 is a proposed new work item on Enhancements of VGCS in public networks for communication of public authority officials.

This work item is intended to be a CN building block under the corresponding SA feature.

There were only three supporting companies in the CN1 meeting, so the number of active supporters needs to be checked again in the CN plenary meeting.

### **4.6.2 IMS changes for fixed NGN**

ETSI TISPAN is working on new generation networks (NGN) in fixed network area. They foresee IMS as a building block in that work and this WID is intended to cover the changes that are necessary to adapt the IMS to NGN.

The new WID in NP-040372 is intended to become a CN-wide building block under the corresponding SA feature level WI.

## **5. ACKNOWLEDGEMENTS**

Again, it has been a race against time and continuously changing requirements to complete the CN1 contribution to new release. We still can't claim that we have made it. But assuming that the requirements are about to freeze, then at least we can claim with reasonable confidence that most of the Rel-6 stuff that has been given to our hands will happen.

It is good to see that our work in CN1 is considered to be so important that when a CN1 position becomes available, we get a competent people stepping in the line of duty. Welcome to the team, Andrijana, and congratulations, Atle.